

RULE 1103




Cutback and Emulsified Asphalt

(A) General

- (1) Purpose: To reduce emissions of volatile organic compounds (VOC) from the use of cutback and emulsified asphalts.
- (2) Applicability. The provisions of this rule apply to the manufacture, mixing, storage, use, and application of cutback and emulsified asphalts.



(B) Definitions

For the purposes of this rule, the following definitions shall apply:

- (1) "Asphalt": a brownish-black cementitious material (solid, semi-solid or liquid in consistency) of which the main constituents are bitumens which occur naturally or are a residue of petroleum refining.
- (2) "Cutback Asphalt": paving grade asphalt liquified with petroleum distillate and as further defined by American Society for Testing and Materials (ASTM) specifications as follows:
 - (a) Rapid cure type: [ASTM D2028-76](#) 
 - (b) Medium cure type: [ASTM D2027-76](#) 
 - (c) Slow cure type (road oils): [ASTM D2026-72](#) 
- (3) "Dust Palliative": any light application of liquified asphalt (cutback or emulsified asphalt) for the express purpose of controlling loose dust.
- (4) "Emulsified Asphalt": any asphalt liquified with water containing an emulsifier. The two kinds of emulsions most pertinent are the anionic and cationic types.
- (5) "Exempt Compounds": Any of the following compounds: carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, ammonium carbonate, and those compounds listed in [40 CFR 51.100\(s\)\(1\)](#).
- (6) "Long-period": a time period of ninety days or greater.

- (7) "Penetrating Prime Coat": any application of asphalt to an absorbent surface to penetrate and bind the aggregate surface and promote adhesion between it and the new superimposed construction. Prime coats do not include dust palliatives or tack coats.
- (8) "Tack Coat": any application of asphalt to an existing surface to provide a bond between new surfacing and existing surface and to eliminate slippage places where the new and existing surfaces meet.
- (9) "Volatile Organic Compounds (VOC)": any compound of carbon, excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate, which participates in atmospheric photochemical reactions, excluding those exempt compounds listed in [40 CFR 51.100\(s\)\(1\)](#).

(C) Requirements

- (1) A person shall not manufacture for sale nor use for paving, road construction or road maintenance any:
 - (a) Rapid cure cutback asphalt;
 - (b) Medium cure cutback asphalt; or
 - (c) Slow cure cutback asphalt containing more than 0.5 percent by volume of VOC which evaporate at 260 °C (500 °F) as determined by [ASTM Method D402-76](#). 
- (2) A person shall not manufacture for sale nor use for paving, road construction or road maintenance any emulsified asphalt containing more than 3 percent by volume of VOC which evaporate at 260 °C (500 °F) as determined by [ASTM Method D244-92](#). 

(D) Exemptions

- (1) The requirements of [Section \(C\)](#) shall not apply to the use of cutback asphalt or emulsified asphalt in the manufacturing of paving materials where such materials are for immediate shipment and eventual use outside of the District.
- (2) The provisions of subsections [\(C\)\(1\)\(b\)](#) and [\(C\)\(2\)\(b\)](#) shall not apply to the following uses of medium cure cutback asphalt and slow cure cutback asphalt which contains more than 0.5 percent by volume of VOC:
 - (a) As a penetrating prime coat for aggregate bases prior to paving;

- (b) For the manufacture of asphalt for long-period storage or stockpiling of patching mixes used in pavement maintenance but not for general paving;
or
- (c) When the National Weather Service official forecast of the high temperature for the 24 hour period following application is below 10 °C (50 °F).

(E) Monitoring and Records

- (1) For cutback asphalts and emulsified asphalts which contain solvents, the following records shall be maintained on a daily basis and retained on site for at least two years in such a manner as to be easily accessible and available for inspection by the Air Pollution Control Officer:
 - (a) Any person who manufactures such asphalts shall maintain records showing the types and amounts of such asphalts which were produced and the destination of these products.
 - (b) Any person who uses such asphalts shall maintain records showing the types, amounts received, and amounts used of such asphalts.

(F) Test Methods

- (1) Analysis of cutback asphalt samples for VOC content shall be in accordance with [ASTM Method D402-76](#).
- (2) Analysis of emulsified asphalt samples for VOC content shall be in accordance with [ASTM Method D244-92](#).
- (3) Measurement of exempt compound content in shall be in accordance with ARB [Method 432](#). Perfluorocarbon compounds shall be assumed to be absent from a product or process unless a manufacturer or facility operator identifies the specific individual compounds (from the broad classes of perfluorocarbon compounds) and the amounts present in the product or process and identifies a validated test method which can be used to quantify the specific compounds.

(G) Compliance Schedule

- (1) Any person manufacturing, mixing, storing, using and/or applying cutback and emulsified asphalts shall comply with the provisions of this rule by April 30, 1995.

[SIP: Approved: 2/5/96, 61 FR 4215, 40 CFR 52.220(c)(207)(i)(C)(1)]